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Annual Report
Fiscal Year 1987

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James Corum, *Director, Office of Management Information Systems*

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Hedy Veith, *Deputy Commissioner, Department of Personnel Administration*
Ann von der Lippe, *Director, Regents' Computer Network*
Patricia Wada, *Director, Bureau for Systems Policy and Planning*

Director's Message

I am pleased to submit the Office of Management Information System's annual report for fiscal year 1987.

The specific achievements of OMIS's five bureaus, highlighted in the following pages, underscore the importance of the agency's three primary goals: efficient use of tax dollars, service, and technical competence.

Cost-Effective Expenditures

A basic OMIS goal is to ensure that the expenditure of taxpayers' dollars for data processing goods and services, whether by OMIS itself or by other agencies, is made in a cost-effective way.

For example, the OMIS Data Center was the first in the United States to install a state-of-the-art NAS AS/XL-90 mainframe computer. But OMIS's real achievements here were initiatives, first to justify the acquisition and second, to make sure these resources are used efficiently. A two-year capacity and configuration plan documented the need for increased capacity and proved that this size mainframe was the most cost-effective option open to the Data Center. And a chargeback system, developed with strong support from the Executive Office for Administration and Finance and the Legislature, gives users of our Data Center a financial incentive to use this new computer, as well as the Data Center's other resources, efficiently.

Service

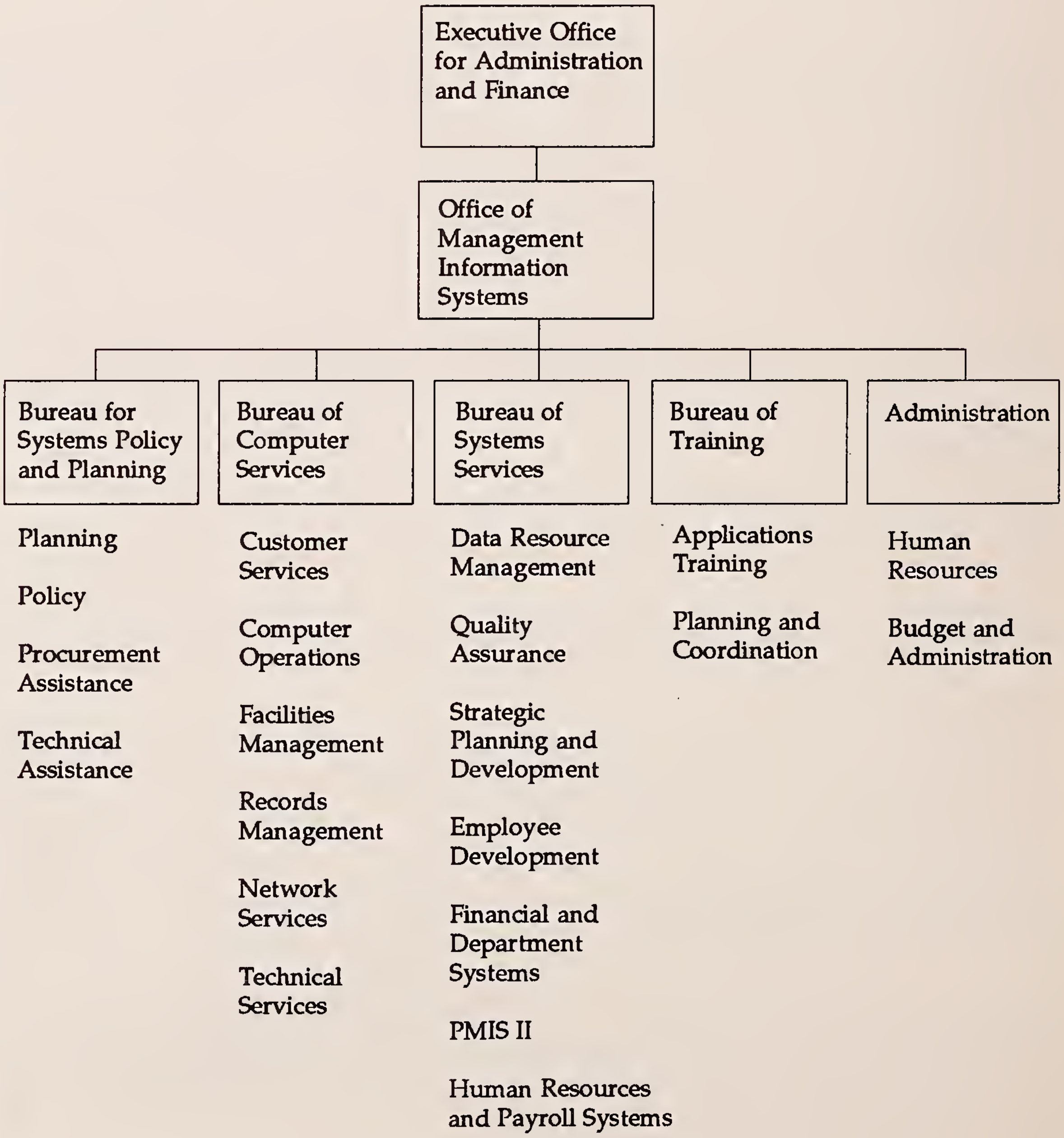
OMIS's second fundamental goal is to provide a high level of service to its client agencies. Achievements in this area range from BSPP's streamlined data processing procurement process and BSS's enhancements of statewide accounting and personnel systems to OMIS's support for the Registry's new ALARS system. OMIS intends to be a service organization. You should expect our first words to be "How can we help you?"

Technical Competence

Attracting and retaining a highly qualified technical workforce is OMIS's third critical goal. Innovative training programs, a professional working environment, and competitive salaries made possible by the Technical Pay Law enhance our ability to build and keep an outstanding staff.

While OMIS takes pride in its achievements, a significant amount of work remains to be done. Our commitment to service, to streamlining OMIS's operations, and to helping state agencies develop and use computer resources efficiently are embodied in our future objectives.

James Corum, *Director, Office of Management Information Systems*


Executive Office for Administration and Finance
Office of Management Information Systems
Bureau for Systems Policy and Planning
Planning
Policy
Procurement Assistance
Technical Assistance
Bureau of Computer Services
Customer Services
Computer Operations
Facilities Management
Records Management
Network Services
Technical Services
Bureau of Systems Services
Data Resource Management
Quality Assurance
Strategic Planning and Development
Employee Development
Financial and Department Systems
PMIS II
Human Resources and Payroll Systems
Bureau of Training
Applications Training
Planning and Coordination
Administration
Human Resources
Budget and Administration

Bureau for Systems Policy and Planning

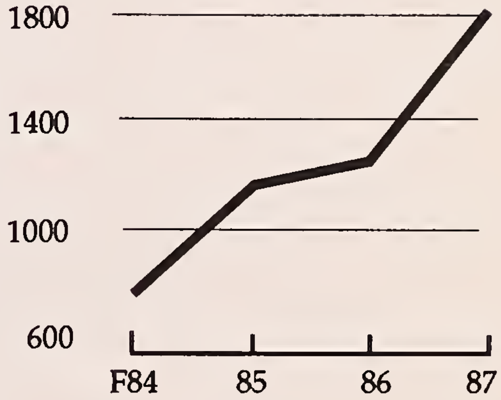
Planning
Policy
Technical Assistance
Procurement Assistance

Introduction

The Policy and Planning Bureau's most critical role is to ensure sound expenditures of taxpayers' dollars by executive branch agencies for data processing goods and services. Such investments are ultimately warranted only to the extent that the computer technology enhances services to Commonwealth citizens. To receive BSPP's support, projected expenditures must be technically feasible, cost-effective, consonant with Commonwealth ADP policy and ADP procurement regulations, relevant to the agency's mission, and within the ability of the agency to implement and support.

Data processing decisions must be informed by up-to-the-minute knowledge of technical options and of the trade-offs among these options. In the eight years since OMIS was established, technological advances have dramatically increased the data processing options available to the state's managers. In response, BSPP has been transformed under the current Administration from a traditional, bureaucratic, procurement monitoring department into a sophisticated, knowledgeable, customer-oriented service bureau.

In the past six years, BSPP has streamlined its procurement process, implemented a coordinated statewide planning process, and attracted a staff of qualified professionals. BSPP is now able to help executive branch agencies invest wisely in data processing goods and services. It does so, in part, by sharing technical knowledge, preparing planning and policy guidelines, and providing procurement assistance.



BSPP processes increasing numbers of requests from executive branch agencies for data processing goods and services.

Recent achievements of the Bureau include:

- A strengthened nucleus of data processing professionals. BSPP has recruited professionals with expertise in such key technical areas as office automation, local area networking and personal computers, data communications, departmental systems, and software development.

- A streamlined data processing procurement process. BSPP has established nine additional Major Account Agreements (blanket contracts) consolidating purchases for frequently purchased data processing goods and services, published significant revisions to its procurement regulations, issued a procurement manual for state managers, and offers a procurement procedures class monthly to state agency personnel.

- A streamlined contracting process. In the past year the number of attorneys working with BSPP has been expanded to three. Clear, concise, standard contract terms and conditions are in place which allow for easier review and acceptance by the vendor community responding to solicitations and thus help to improve the Bureau's relationship with vendors and decrease the time required for contract negotiations.

- An active vendor education process. BSPP conducts a semiannual conference, "How to Do Business with the Commonwealth," with attendance averaging over 200 vendors. BSPP has appointed a vendor liaison who provides vendors with up-to-date information and support. These initiatives improve the Bureau's relationship with vendors and enhance their knowledge of the Commonwealth's DP procurement procedures.

- Enhanced interdepartment communications. Each month BSPP mails information to department MIS directors highlighting amendments to blanket contracts, new contract terms and conditions, technical notes, and other items of general interest. Quarterly, BSPP mails this information to data processing coordinators of Commonwealth cities and towns, political subdivisions, and school districts.

- Significant savings from competitive procurements. In FY86/87 savings from statewide blanket contracts alone exceeded $5 million. Specific agency blankets resulted in an additional savings of $1.3 million.

During the next year BSPP plans to:

- Improve the ADP planning process. Additional planning support to departments should lead to better agency plans and more efficient use of resources.

- Issue additional policy memoranda. Guidelines on microcomputer procurement, the support requirements of departmental systems, and the use of the Commonwealth's tax-exempt lease purchase (TELP) blanket contract will be among the policy memoranda issued as part of BSPP's regular monthly mailings.

- Provide more technical assistance to executive departments. As more and more state managers realize the advantages of automation, BSPP's provision of technical guidance and advice will continue to grow in importance.

Patricia S. Wada, *Director, Bureau for Systems Policy and Planning*

BSPP's four major responsibilities are Planning, Policy, Technical Assistance, and Procurement Assistance.

Planning

Agencies' need for data processing resources continues unabated, and the rate of growth seems matched by the increase in different technical solutions. Effective planning and an ongoing assessment of available data processing resources are essential in such an environment. BSPP has designed its planning process to ensure active involvement by key department and Executive Office of Administration and Finance decision makers.

Semiannual planning meetings with departments and secretariats enable BSPP to improve the allocation of its resources, identify the need for new blanket contracts, and introduce new technologies. Departments in turn have an opportunity to emphasize their data processing priorities. The meetings also enable BSPP to identify areas where the plans of an individual department and Commonwealth DP policy are out of alignment. BSPP can then work with departments to find viable, timely solutions to their data processing needs within a statewide context.

Major Achievements

- Planning meetings with senior MIS management. During the past year BSPP met with more than 60 departments and five secretariats to develop, review, or update their Automated Data Processing (ADP) Plans.
- Pilot BSPP budget process. In conjunction with the Budget Bureau, BSPP developed a pilot joint review process to better integrate the budget and ADP planning processes.

Objective

- Further integrate the ADP planning process and the Commonwealth's budget process. BSPP will conduct joint ADP expenditure planning and budget review sessions for ten pilot agencies in FY88, double the number in FY87.

Policy

BSPP's policies are designed to improve both the procurement process and the use of systems that agencies procure. BSPP publishes these policies as OMIS Policy Memoranda.

In the nine years since OMIS was established, data processing has increased dramatically in executive branch agencies while technological advances have expanded the data processing options available. Therefore, it is essential for the Commonwealth to have policies and guidelines that are sensitive to both current technological opportunities and user needs. These policies, instituted with proper planning, promote responsible, cost-effective procurement and use of data processing resources statewide.

Major Achievements

- Revised procurement regulations. Administrative Bulletin 86-3, effective on December 22, 1986, spells out in greater detail the appropriate uses of non-competitive (sole source) contracts, introduces a small purchase procedure, and exempts purchases under $500.

- Policy Memoranda. OMIS's current Policy Memoranda include:

Project AF-29s (86-1). Prior to 1986, departments had to submit a separate AF-29 for each vendor, even if the vendors were supplying goods and services for a single data processing initiative. In order to reduce the number of AF-29 requests, and thereby the number of times department heads, executive offices, BSPP, and EOAF are required to give approval, BSPP established a policy of consolidating approval for projects.

Needs Assessment and Requirements Definition Studies (86-2). This memorandum prohibits vendors who conduct a Needs Assessment or a Requirements Definition from performing any follow-on work. The intent is to eliminate any possibility of a conflict of interest or the appearance of a conflict of interest, and to help ensure that consultant-prepared needs assessment studies are unbiased.

Data Communications (86-3). This memorandum establishes a policy of interconnecting the Commonwealth's data centers so that any workstation, subject to security limitations, can have access to any data center.

Generic Wiring System (87-1). This memorandum requires agencies to install generic wiring in place of vendor-specific cable. This policy will lead to significant savings of time and money as workstations are moved or added, or as departments change vendors or move to new locations.

Objectives

- Issue guidelines to support responsible, cost-effective microcomputer management. BSPP will respond to issues raised by microcomputer users concerning software copyright compliance, maintenance, training, data and physical security, and software development.

- Issue a Policy Memorandum on Tax-Exempt Lease Purchase (TELP) procedures for data processing hardware and software. Among the issues this policy will address is the use of TELP funds for software acquisition.

- Issue a Policy Memorandum requiring Systems Administrator support for departmental systems. Experience has amply demonstrated departmental systems' need for a Systems Administrator to maintain equipment and provide support to system users.

■

Technical Assistance

Departments often lack the technical expertise necessary to determine what data processing equipment or services will best meet their needs. BSPP's technical assistance, which begins with the planning process and continues throughout the procurement cycle, can range from answering questions about how to evaluate PC maintenance options to determining the best way to restructure a data network.

During the course of providing technical assistance, BSPP must assess whether a department's proposed plan is technically feasible, determine what vendors are available to satisfy the procurement, and decide whether the department has the technical expertise to support the procurement. BSPP must also evaluate whether the proposed system is suitably aligned with the department's overall ADP plan. As a result of these assessments, working with the department BSPP may develop a procurement recommendation that differs from the department's initial request but has a higher chance of success, is more cost-effective, or more appropriately satisfies the department's requirements.

Major Achievements

- Online case tracking system. Responding to a legislative mandate, BSPP helped the Commonwealth's District Attorneys procure and implement a major statewide case tracking system.

- A new workers' compensation system. BSPP's collaboration with the Division of Industrial Accidents led to a new workers' compensation system that meets the Legislature's requirement for better case tracking.

- The Department of Public Health's ABACUS procurement. The ABACUS project (Automated Billing and Client Utilization System) provides the hardware and software for a complete system for patient records administration, utilization, review, and resource generation for public health hospitals.

- MASSLINK. BSPP collaborated with OMIS's Bureau of Systems Services to implement MASSLINK, a file transfer utility which allows users to download files from the OMIS mainframe to their microcomputers.

- Generic Wiring. BSPP responded to a critical concern about rising cabling costs, multiple vendor environments, and departments on the move by requiring generic (that is, standard) rather than vendor-specific wiring when agencies install new equipment or renovate their current office space.

- Improved Data Communications. BSPP collaborated with OMIS's Bureau of Computer Services to install a high-capacity T1 data circuit between Boston and Springfield that will replace many separate inter-LATA data circuits and save the Commonwealth more than $300,000 annually.

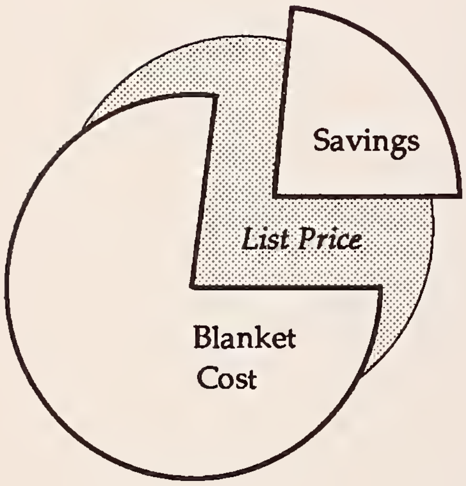
■

Procurement Assistance

Executive Branch departments submitted more than 1,700 requests for data processing equipment or services in FY87. Requests ranged from single microcomputers to a procurement that provides hardware and software for a billing and client utilization system for the Department of Public Health. BSPP must indicate to the Commissioner of Administration or his designee whether these requests should be approved or not. For a positive recommendation, a project must be cost-effective, legal, technically feasible, and within the requesting department's ability to support with the staff, facilities, and funds necessary to ensure the project's success. These issues are determined at a screening conference.

Major Achievements

- New blanket contracts. BSPP established nine new blanket contracts, bringing the number of available contracts to a total of 16. Blanket contracts provide two distinct benefits. First, they significantly reduce the time it takes to complete a procurement. And second, because vendors can reasonably expect they will make multiple sales, they are willing to offer lower prices than they would for a single competitive bid. By purchasing from blanket contracts, departments saved $3,039,365 on procurements in FY86, and $2,959,841 in FY87.



Blanket Contracts	FY87	FY86
Data Communications Equipment	107,262	126,925
Terminals, Printers, Controller, SNA/SDLC Networks	239,462	518,884
Dedicated Word Processing Equipment	113,070	221,302
Burroughs-Compatible Terminals, Printers, and Micros	60,010	17,262
Clustered Micros	197,900	243,400
Standalone Micros	1,549,524	1,506,224
Cabling Services	118,987	76,780
Bulk Cable Connectors	12,652	65
Sperry-Compatible Terminals, Printers, and Multiplexors	173,463	112,968
Small LANs		16,913
Computer Assisted Transcription Equipment	60,020	
Non-Impact Printers	33,604	9,931
Coax to Wire Adapters	11,025	25,057
Microcomputer Software	266,311	163,154
Tape Cartridges	16,551	
TOTAL SAVINGS	$2,959,841	$3,039,365

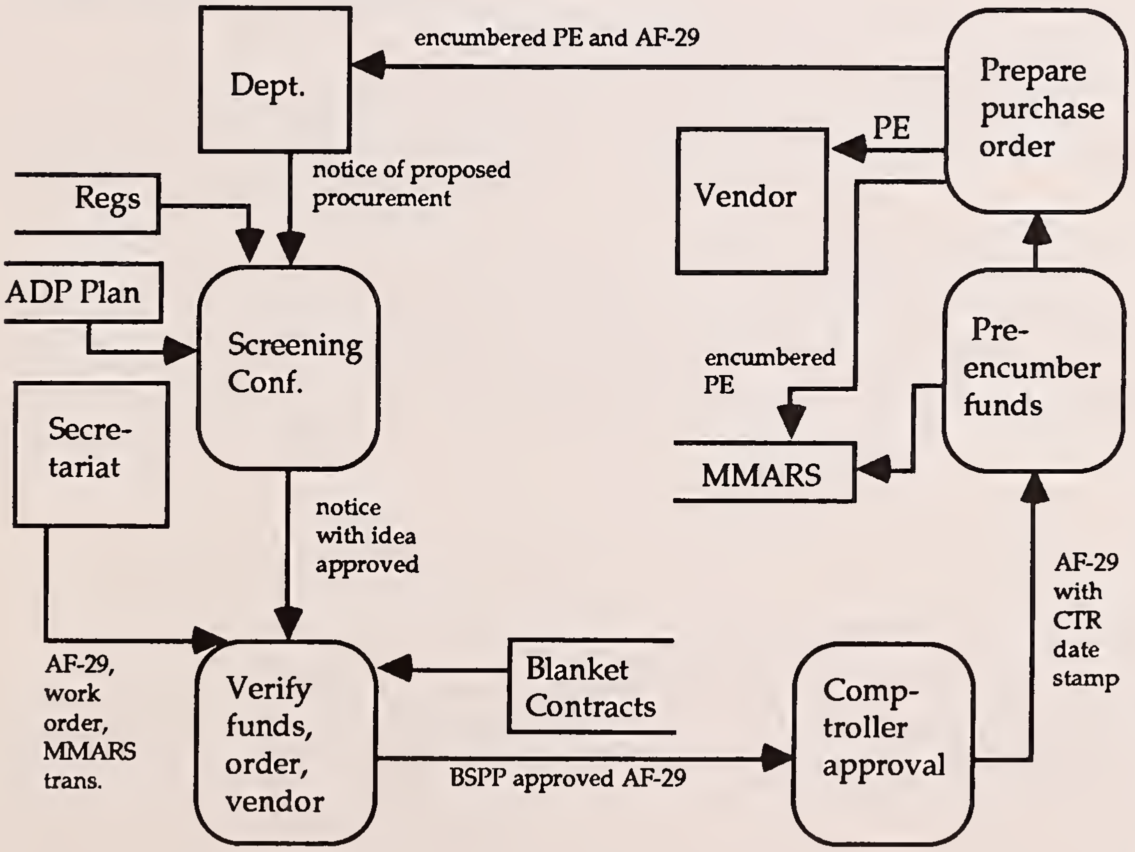
- A streamlined procurement process. Two new online systems help BSPP staff to process AF-29 forms. Jointly, they provide BSPP with the online management tools necessary to monitor AF-29 processing, track procurements, calculate the savings obtained by the Commonwealth from competitive procurements and blanket contracts, and provide agencies with immediate up-to-date status reports for their AF-29 requests.

- Introducing new technologies to help improve departmental performance. For example, BSPP assisted the Criminal History Systems Board in developing and issuing a competitive procurement for the Automated Finger Print Identification System (AFIS). The enhanced graphics scanning capability of the system has made it possible for the Criminal History Systems Board to confirm the identity of apprehended suspects by scanning a fingerprint file; the system also allows the Board to search the database to link prints with suspects.

Objective

- Write and publish "standard" documents for competitive procurements. BSPP will prepare standard documents for Invitations for Bids (IFBs) and Requests for Proposals (RFPs). With these standard documents in place, BSPP can further streamline the procurement process.

This data flow diagram shows the process through which a department might purchase a PC from the Standalone Micro Blanket, or a local area network from the Clustered Micros Blanket.



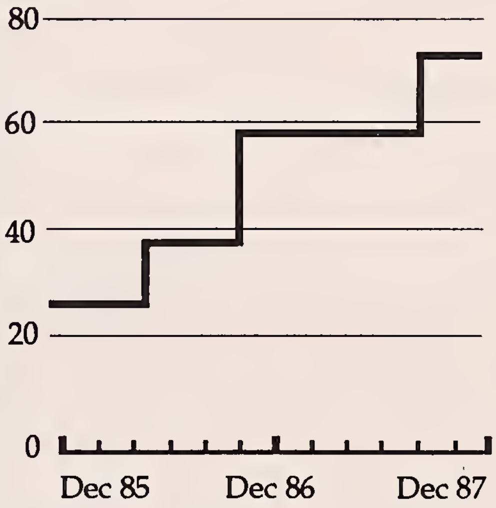
Bureau of Computer Services

Customer Service Department
Computer Operations
Facilities Management
Records Management Center
Network Services
Technical Services

Introduction

The Bureau of Computer Services, the Commonwealth's largest Data Center, provides mainframe computer resources to over 130 state agencies and supports a wide range of applications, from the Commonwealth's central accounting, personnel, payroll, and group insurance functions to agency-specific applications such as Welfare's Monthly Income Reporting system which provides data on cases for AFDC and refugee assistance or the Division of Registration's system which generates and tracks professional licenses.

At the heart of the Data Center are two large mainframe computers, a NAS AS/XL-90 and an IBM 3081K+, with a combined capacity of 72 million instructions per second (MIPS), making BCS one of the larger data centers in New England. Currently BCS supports over 5,000 terminals throughout the state, and has over 140 billion characters of online storage.



OMIS increases capacity from 26 to 72 MIPS in two years.

Fiscal Year 1987 was a banner year for the Bureau. Between providing hardware and technical support for the Massachusetts Management Accounting and Reporting System (MMARS) which became operational in July of 1986 and the installation of the NAS computer in August, 1987, many exciting initiatives were completed by the BCS staff.

Major achievements of the Bureau include:

- A new chargeback system. Operational on July 1, 1987, the new system charges agencies for the Data Center resources they use. The system is designed to give agencies incentives for using OMIS computer resources efficiently, and the ability to budget themselves for increased use of resources. It will also enhance BCS's capacity planning ability.
- A comprehensive capacity and configuration planning study. Work begun in November, 1986 resulted in a two-year capacity plan which proved that BCS

could save over $1 million a year for the next five years by replacing its three older, smaller computers with new technology. The study also gave BCS the opportunity to interact more closely with users and thus establish a basis for the ongoing exchange of information necessary to ensure that adequate data processing resources are available to meet the growing needs of BCS's customers.

- A data security administrator. A third major initiative during FY87 was the hiring of a Security Administrator who is charged with recommending and implementing a comprehensive data security policy for the OMIS Data Center.

In Fiscal Year 1988 the Bureau of Computer Services will continue to build upon these three initiatives. In order for it to become a world-class data center, BCS will refine the chargeback system, continue to work with its customers to improve its capacity planning techniques, and complete its installation of a state-of-the-art data security program.

J. Fred Gale, *Director, Bureau of Computer Services*

BCS has six administrative units: Customer Services, Computer Operations, Facilities Management, Records Management, Network Services, and Technical Services.

Customer Service Department

More than 130 Commonwealth departments depend on the Customer Service Department (CSD) staff to simplify their access to the Data Center and to help them use Data Center resources efficiently. During an average month CSD provides counter assistance to 3,100 people, handles 1,000 phone inquiries, sets up 3,700 jobs, and produces 7,750,000 pages of output which are picked up at CSD's customer service window or delivered by courier to 31 locations daily. In addition, Customer Service provides general information and referral, communicates Data Center news to its customers, provides IDs and passwords for authorized access, and maintains the OMIS Library, which holds a broad collection of data processing books, manuals, and periodicals for use by all state employees.

Major Achievements

- New accounting system. CSD converted to a new account number system that maximizes accountability for data processing services, incorporates the new department codes assigned under MMARS, and provides a mechanism for agencies to account internally for data processing services.

- Allocation System Know-How (ASK). A new online service, ASK, allows customers to allocate Data Center resources from their terminals. Two ASK modules were available in FY87: CICS Allocation Request System (CARS) and DASD Allocation Request System (DARS). Customers may make online requests for registration in the CICS tables using CARS and for storage of permanent datasets (DASD) using DARS, and thereby avoid paper request forms.

- Innovative communications facilities. A new emergency broadcast feature enables the Data Center to contact customers about scheduled and unscheduled outages and other emergencies through messages presented on the welcome screen. CSD has also introduced a Product Informational Bulletin which carries news of Data Center software products. The Department continues to distribute Customer Informational Bulletins, which contain general announcements, and Technical Informational Bulletins, directed specifically to programmers.

- Enhanced report distribution. To handle the report volume generated by MMARS and other new systems, CSD instituted several measures to ensure an efficient, timely printing service. The Department added 175 bins to the existing 125 in its distribution area, expanded the night shift to ensure timely morning availability of reports, and established specific service level objectives. A workload tracking system was developed to produce daily reports on courier activity, mailing services, and work order processing. In addition, several micro-based systems have been developed to maintain data about customer contacts, access authorizations, and job output.

Objectives

- Install PMIS and MMARS jobs in the BCS scheduled production environment. FY88 marks the year in which job scheduling for these important statewide systems is transferred from BSS, their developer, to BCS, as they become standard production jobs.

- Procure a logon screen replacement. CSD is responsible for obtaining competitively a logon screen package that will allow users to access multiple applications after a single logon and that will also allow immediate broadcast of emergency messages.

- Implement a new production library management system.

- Provide training and a help line for Data Center software products.

- Publish a BCS User's Guide.

Computer Operations

The Computer Operations Department has responsibility for BCS's computer equipment. Most of the equipment, which includes BCS's two mainframes, three front-end processors, 176 direct access storage devices, 16 tape drives, and 8 cassette drives, is located on the 8th floor of the McCormack State Office Building. Department personnel run production jobs, monitor online applications, mount tapes, and perform whatever other work is required to ensure smooth functioning of the Data Center. Operation's three shifts keep the Data Center running 24 hours a day, 358 days per year.

Major Achievements

- Successful implementation of APEX, an automated scheduling system. This system provides faster job processing, online updating and reporting, automatic job submission, dependency control processing, JCL management, automated restart/recovery, prompting, and security.
- A new, high performance tape cartridge system. Significant savings resulted from converting from tape to cartridge for faster batch processing. In addition, the cartridge system allows Operations to back up production files in a much shorter time. The nightly ADABAS backup, which used to take from 60 to 120 minutes, now runs in 40 to 75 minutes. Weekly backup time has been reduced 55%, from approximately eighteen to eight hours.
- Conversion of 2,000 jobs to new JCL standards. Introduction of the new standards has simplified access to applications when programmers or users need to make changes.
- Replacement of temporary tape datasets by temporary disk datasets. This work significantly reduced processing time due to the fact that the disk datasets require no operator intervention.
- Chargeback. Job accounting information was updated to ensure correct chargeback reports.

Objectives

- Complete tape to cartridge conversion. During FY88 Operations will gradually phase out all but one of the reel-to-reel tape units in favor of the more efficient cassette drives.
- Review storage needs of user agencies. Computer Operations plans to reduce tape storage by 40%.

Facilities Management

The Facilities Management Unit (FMU) is responsible for the physical and environmental needs of the Data Center. The Unit also oversees the installation of computer equipment, provides for disaster recovery and physical security, manages the computer hardware and software maintenance budget, and provides systems and programming support for the Integrated Invoice System.

Major Achievements

- Installation of a NAS AS/XL-90. This new, state-of-the-art computer brings the Data Center's total computing power from 57 to 72 MIPS, a 26% increase since September, 1986.
- Security Control Center. FMU installed and manages equipment to control the physical security of the Data Center and all OMIS offices located in the McCormack Building.
- Disk room reorganization. FMU undertook major renovations which reorganized online storage equipment, increased security, and improved the work flow.
- PMIS backup. With help from BSS and the Registry of Motor Vehicles, BCS is now able to run any PMIS weekly payroll at the Registry Data Center if conditions require such emergency action.

Objectives

- Provide a backup for MMARS, the Commonwealth's accounting system. BCS will take steps to ensure that in an emergency central parts of MMARS can also be run at the Registry Data Center.
- Install motor generators in the McCormack Building. These generators will provide backup power to the Data Center for use in case of a building power failure.
- Continue planning to create a second OMIS data center outside the greater Boston area. In conjunction with the Division of Capital Planning and Operations (DCPO), OMIS plans to lease a second data center within two years, with the intention of having a new center constructed within five years. The workload on the current data center will be divided, several new applications slated for trial runs at their developers' data centers will be moved in-house, and both data centers will be equipped to accept input from all terminals in the BCS networks. Work will also be done to provide backup for the Registry data center and its online applications.

Records Management Center

When the Records Management Center opened in 1973 in Westborough, Massachusetts, its purpose was to centralize Medicaid record keeping and data entry. But today's systems decentralize these responsibilities and RMC's role has changed and expanded accordingly. The Center now provides data entry for numerous agencies and offers a variety of services including programming, data processing, key entry, microfilming, and mailing.

Major Achievements

- Assumption of data entry for the Registry of Motor Vehicles Data Center during the Registry's conversion to its new Automated License and Registration System (ALARS).
- Mailroom volume in excess of one million pieces. Equipment now includes two sophisticated Bell & Howell Data Insertion Mailing System machines, a Pitney Bowes mailing machine, and several bursters, decollators, and postage machines. Other mailroom services include pick-up and delivery, including delivery to the post office, a pre-sort service, and postal account maintenance.
- Improved document processing. The clerical unit processed over 115,000 source documents a month, or 1,380,000 pieces in fiscal year 1987.

Objectives

- Establish and maintain equitable and competitive rates. RMC intends to remain competitive with outside data entry services for state agency business.
- Develop a marketing strategy to increase user awareness and use of RMC services throughout the Commonwealth.

Network Services

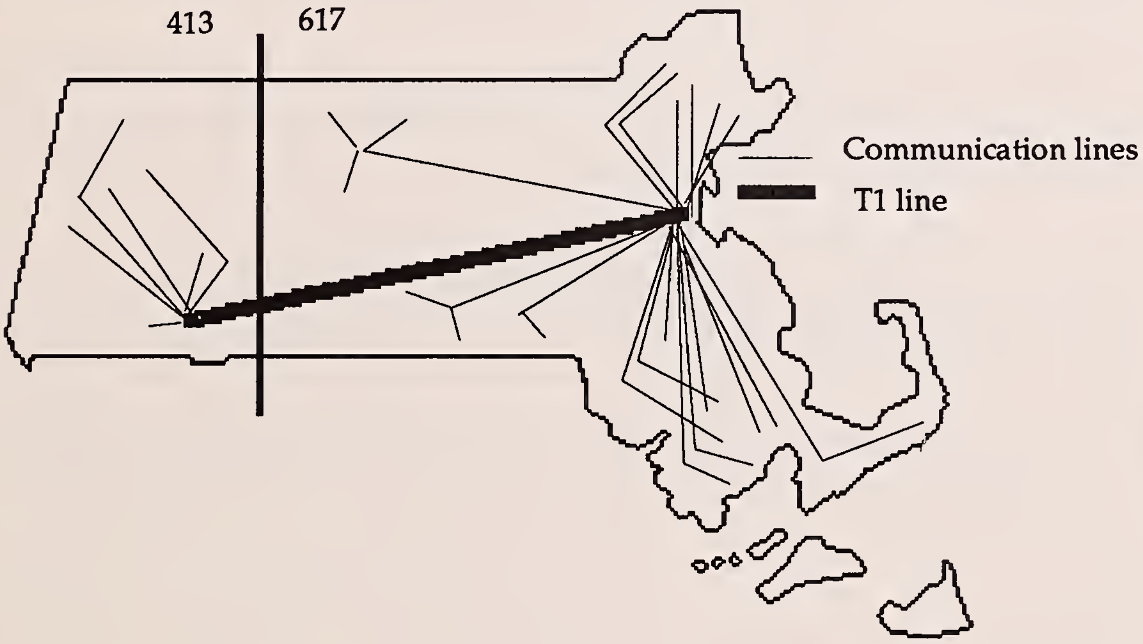
The Network Services Unit (NSU) manages a sophisticated statewide data communications network supported by IBM 3705 and 3725 front-end processors. The number of terminal devices in the network has increased by 17% since last year. The network, based on IBM's SNA/SDLC protocol, has increased from 4,200 terminals to 5,000 in the last year.

Major Achievements

- Dial-up support and security. NSU currently provides over 12,000 minutes of dial-up access to users each week. Port protection devices and new equipment provide top flight security and an average logon time of less than one minute 99% of the time.
- High bandwith T1 circuit between Boston and Springfield. A leased 1.544 megabit per second T1 link between the Data Center and the Springfield "State House" makes possible the elimination of 50 or more leased circuits between the 617 and 413 area codes at an average savings of $400 per circuit per month.
- New back-up systems. Back-up systems were introduced by NSU that allow BCS to replace field network components with minimal disruption to users.
- Session routing. Enhanced routing routines now allow sessions to continue in the event a data path is disrupted. These routines, which are transparent to the user and are automatically invoked when outages occur, will greatly reduce the impact of outages on the user.

- Class-of-service priorities. BCS is now able to assign different transmission priorities to different classes of users. During prime shift, for example, a high transmission priority can be given to online users, a medium priority to batch jobs, and a low priority to printers, to provide better and more efficient service to end users.

- Network Performance Monitor (NPM). This tool allows TSU to manage the data communications network more efficiently. NPM collects and reports on various types of network performance data to provide analytical support for system tuning, network capacity planning, and performance evaluation.



The OMIS network links over 5,000 terminals and printers throughout the State. The T1 line from Boston to Springfield reduces the cost of communicating between area codes.

Objectives

- Install NETVIEW. This comprehensive, full function network management tool will allow the network to monitor network status more efficiently and react to situations as they occur. NETVIEW provides both hardware and session monitoring and can be used to create management reports from the data it produces. It also provides a feature for automatic reactivation of failed resources.

- Expand and refine the network. The implementation of SNI (IBM's SNA Network Interconnection) will allow an increase in the number of terminals, lines, and control units without major expense, and will free users from current addressing constraints.

- Select a replacement for the current network terminal management product. The new system will display an application's status on the welcome screen, and should also support greater message-sending capability, customized user menus, and a dynamic updating facility.

- Enhance network reporting capability. New network management sofware will enable NSU to document response times, transaction volumes, line utilization rates, and availability rates for BCS management and for user agencies.

- Implement Paradyne's 5530 Analysis System. With this system NSU will be able to track problem resolution for equipment failures, line outages, and other network problems, document time spent by Network Services on each problem, and record circuit statistics for agencies on a weekly and monthly basis.

- Upgrade dial-up capability. BCS will add support for 2400 baud synchronous dial-up service to its current 1200 baud and 2400 baud asynchronous service.

Technical Services Unit

The Technical Services Unit (TSU) has overall responsibility for system hardware and software for the Data Center's mainframe computers. The Unit is also charged with planning and implementing the expansion and reconfiguration of the Data Center's computing facilities.

Major Achievements

- Managed growth in the Data Center's multiple-CPU environment. The acquisition of the NAS AS/XL-90 brought the total computing resources of the Data Center to 72 MIPS. A new facility, Global Resource Sharing, allows the Unit to maximize its use of these computer resources.

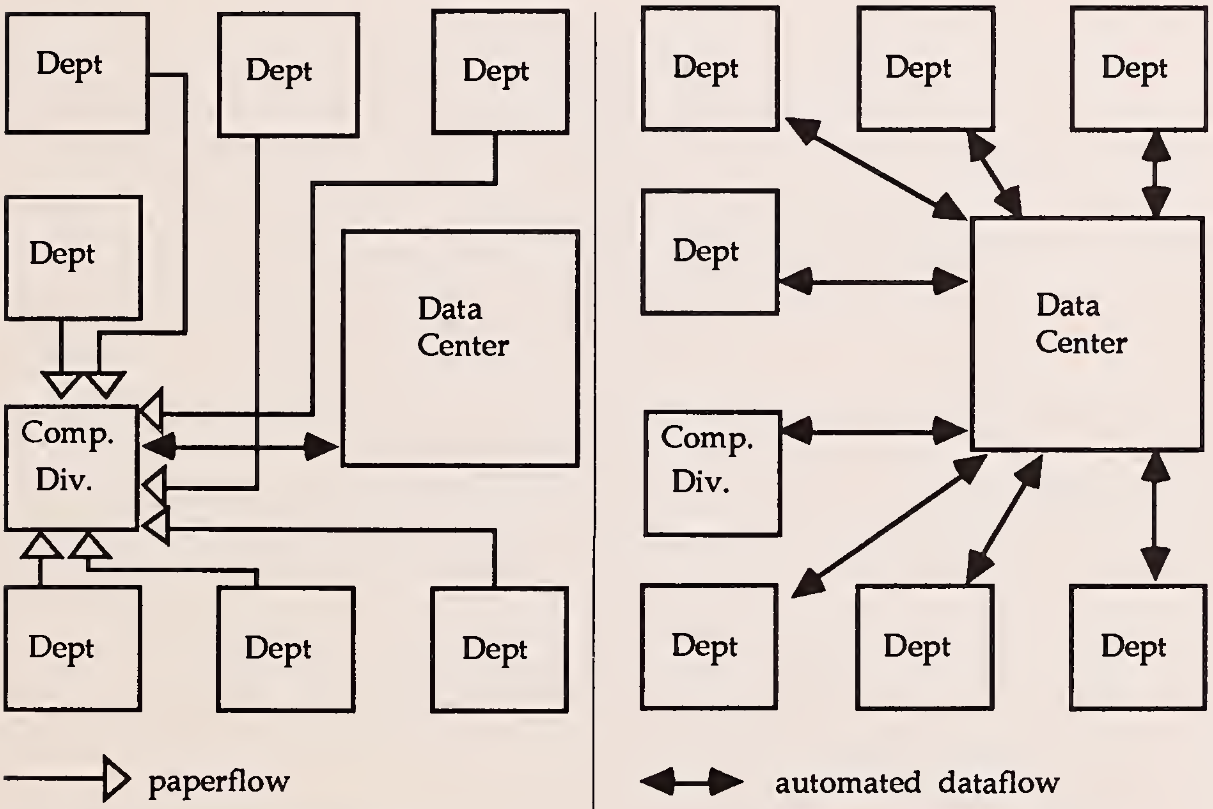
- Extended architecture implementation. TSU's upgrade to IBM's MVS/XA operating system allows greater efficiency and better management of its storage and I/O facilities, thereby providing more consistent and timely service to client agencies.

- Application databases. Databases have been physically reorganized to take advantage of high performance disk technology.

Objectives

- Expand the capacity management program. BCS will continue quarterly capacity forecasts for CPU usage, and expand quarterly reports to include online storage (DASD).
- Improve performance management reporting. TSU will add two new categories: online response time, and transaction volumes.
- Revise and publish the BCS Data Management Policy.

With new statewide systems such as MMARS and PMIS, the relationship of the Data Center to the Commonwealth agencies has become much more direct.



Prior to MMARS, departments received print-outs from the OMIS Data Center. Data entry was centralized at the Comptroller's Division and all updating took place in batch.

MMARS decentralized data entry, allowing departments immediate on-line access to the Data Center's mainframe computers.

Bureau of Systems Services

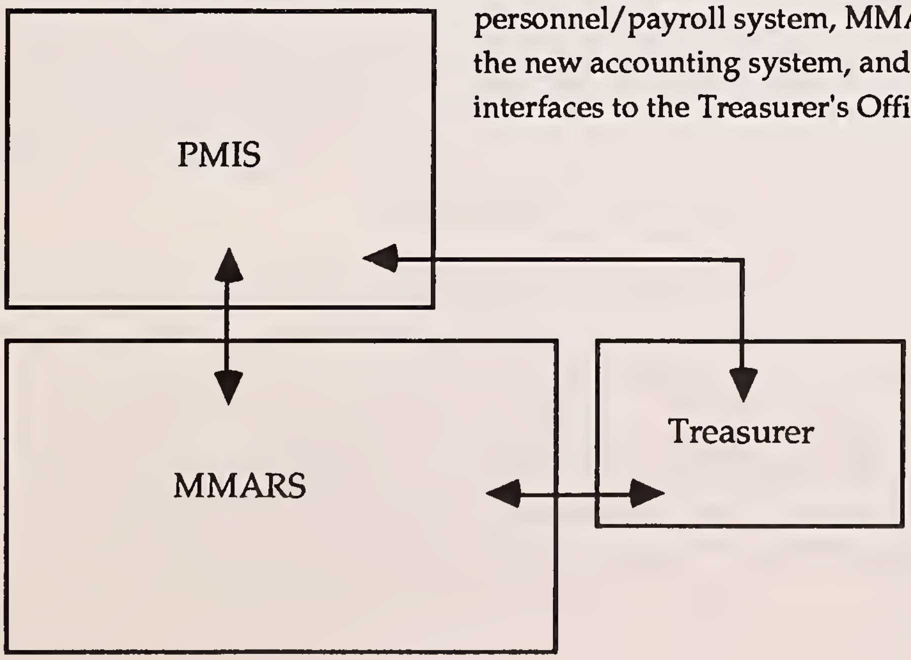
Data Resource Management
Quality Assurance
Strategic Planning and Development
Employee Development
Financial and Department Systems
PMIS II
Human Resources and Payroll Systems

Introduction

Prior to 1983, managers in state agencies found that gaining access to fundamental personnel, payroll, accounting, or budget information was difficult and time-consuming. The software was outmoded — or nonexistent in some cases — and managers buckled under the weight of jobs that could, and should, have been automated. Without statewide financial and personnel management systems, and their associated applications programs and databases, these managers lacked the tools they needed to work effectively.

Since then, the Executive Office for Administration and Finance has embarked on a program to create statewide, computer-based administrative systems. By 1988, all executive branch agencies will have integrated accounting, employee benefits, purchasing, payroll, and personnel systems. At the close of this five-year period, Massachusetts will have advanced from having virtually no auto-

BSS is responsible for maintaining PMIS, the executive branch's online personnel/payroll system, MMARS, the new accounting system, and interfaces to the Treasurer's Office.



PMIS
Personnel/Payroll Management Information System

MMARS
Massachusetts Management Accounting and Reporting System

mated assistance of this type to being one of the few states in the nation supporting such broadly automated and integrated systems.

The Bureau of Systems Services (BSS) has worked closely with other EOAF agencies to effect this transformation. Specifically BSS analyzes system requirements, designs and develops application software, and maintains and enhances the resulting systems. BSS also occasionally helps individual agencies develop their own automated systems.

The Bureau's recent achievements include:

- Massachusetts Management Accounting and Reporting System (MMARS). Prior to 1986, the Comptroller and agency managers depended on an outmoded, 15-year-old batch-oriented system. In 1986, MMARS, the new Massachusetts Management Accounting and Reporting System, developed jointly by BSS and the Comptroller's Division, replaced its badly outdated predecessor with a centralized online system that integrates decentralized departmental accounting with the Comptroller's General Ledger, Accounts Payable, and Accounts Receiveable functions. The new system has improved the timeliness and accuracy of the state's financial reporting, the speed with which the Commonwealth pays its bills, and the accountability of state managers; in fact, the Comptroller and BSS regard the installation of MMARS as an achievement of singular importance in the effort to increase the efficiency of state government.

MMARS is not a static system; during FY87 several additions have been made to meet the needs of user departments. For example, the Extended Purchasing System (EPS) replaced an inefficient stand-alone purchasing system. EPS allows MMARS users to complete a requisition that initiates the bid process, and significantly reduces the clerical work formerly required of the Purchasing Agent's staff.

- Massachusetts Personnel Reporting System (MPRS). Mippers, as the system is called, makes it easy to determine the number of employees in the major branches of state government. MPRS integrates personnel information on state employees from executive branch agencies, higher education institutions, the judiciary, and the six constitutional offices.

- Department of Industrial Accidents (DIA) System. Prior to FY86, the Department of Industrial Accidents used a manual system to track the 145,000 Massachusetts citizens annually whose on-the-job injuries result in five or more days of lost work time, and the 30,000 claims needing DIA adjudication. DIA and BSS developed an online case processing system that allows the Department to manage its caseload efficiently and to comply with new case management legislation.

During the next year BSS plans to:

- Specify and purchase software engineering tools and introduce systems development life cycle methodology. Large companies and institutions have long recognized that the development and maintenance of high-quality applications software consumes a greater part of an MIS department's effort and expense than do hardware procurement and maintenance. Good software development requires efficient tools, as well as established procedures that allow software analysts, designers, and programmers to maximize their productivity. To improve the process of designing, testing, and documenting new applications packages, BSS will obtain software-engineering tools and establish a single comprehensive Systems Development Life Cycle Methodology as its standard. The tools and the new project management program will enable BSS to improve its service to agencies; in addition, applications programmers in other state agencies will be able to adapt these software-development techniques for use in their own software development efforts.

- Continue to support applications development efforts for state agencies. Work scheduled for 1988 includes enhancements to the EPS system used by the Purchasing Agent's Division; installation of an interface between PMIS and ELIPSYS, the Department of Personnel Administration's civil service system; a streamlined minority business expenditure reporting system; and the Commonwealth's Automated Payroll System (CAPS), which will replace an existing monthly payroll system.

Anne Fitzgerald, *Director, Bureau of Systems Services*

During the period covered by this report, BSS has reorganized. The new Strategic Planning and Development Group will address the future of state computing and data processing needs while the new Employee Development section will assure that we can attract and retain the first-rate professional staff to meet those needs. Further, FSG, MAPS, and STL have been replaced by three Application Support Groups: Financial and Department Systems, PMIS II, and Human Resource and Payroll Systems.

In FY87, BSS consisted of five major units: Data Resource Management; Quality Assurance; Financial Systems Group (FSG); Massachusetts Administrative Projects (MAPS); and Scheduling, Tracking, and Licensing (STL).

Data Resource Management

The Data Resource Management Group provides standards, guidelines, application-design help, and technical support to client agencies; manages the ADABAS software; and monitors performance on all production databases. In addition, DRM provides technical support for ADABAS-related products, which include the programming language NATURAL, and the data-dictionary software PREDICT. Programmers use these products to develop systems applications in ADABAS.

Major Achievements

- Restructuring of production databases. DRM's efforts to streamline performance of database applications have ensured that Data Center resources are used efficiently. They have also simplified system maintenance, and reduced the computer resources used by these systems, thereby lowering chargeback costs.
- Computer workload balancing. Completion of this project has resulted in more equal distribution of work in the Data Center and a more effective use by BSS of Data Center resources.
- Database file creation. DRM built ADABAS files for MMARS, PMS, and other statewide systems. In addition, it created database files for more than a dozen client agencies and provided on-going maintenance of over 600 database files.
- ADABAS chargeback. The former OMIS chargeback system failed to bill out ADABAS resource usage to user agencies. DRM completed the tasks required to ensure that use of ADABAS resources is reflected in agency chargeback invoices.

Objectives

- Develop and implement guidelines for database administration within project life cycles.
- Offer each agency strategic data planning assistance within the application development process in order to achieve a balance between the Commonwealth's resources and the agency's needs.
- Provide consulting services to agencies for data analysis, file design, and database performance.
- Support the implementation of comprehensive database and NATURAL application security.

Quality Assurance

Quality Assurance strengthens BSS's applications-development productivity by introducing standards and procedures as well as supporting the Bureau's publishing and information needs.

Major Achievements

- Project-management and systems-development methodologies, techniques, and tools. The effort to standardize project management and systems development will enable BSS to improve service to its client agencies.
- Bureau-wide standards for COBOL, NATURAL, and an online screen design.

- Publishing Group. This group is charged with the task of creating clear, well-documented manuals and other related materials. The group is made up of editorial and design professionals and employs high-quality equipment in the effort to produce clear, attractive, and easy-to-use publications.

Objectives

- Implement the Systems Development Life Cycle Methodology. This methodology provides a standard framework for developing new systems.
- Select an automated Project Management System to guide all software-development projects. This tool will help plan and control the scheduling of software development.

Strategic Planning and Development

This new unit will ensure that BSS addresses the Commonwealth's future computing needs. The focus in FY88 is strategic planning.

Objectives

- Rewrite the MMARS core. New core is written in NATURAL. Its implementation offers BSS control over a portion of the system that had been maintained by the vendor, and a more efficient system.
- Select Computer Aided Software Engineering tools. CASE tools, a recent development in design-engineering technology, maximize the productivity of software analysts and programmers.
- Integrate BSS's microcomputers into OMIS's local area network to increase online communication and decrease paper-based communication.
- Complete initial BSS strategic planning document outlining goals and processes for years one, two, and three.

Employee Development

The new Employee Development Unit coordinates BSS hiring, oversees the performance review system process, and coordinates the training of all BSS personnel.

Objectives

- Develop a proposal for a BSS Chargeback system.
- In conjunction with other OMIS bureaus, develop an entry level training program for programmer/analysts.

- Create employee development policies and procedures.
- Assure that all employees receive timely and useful performance reviews and training plans.

Financial Systems Group

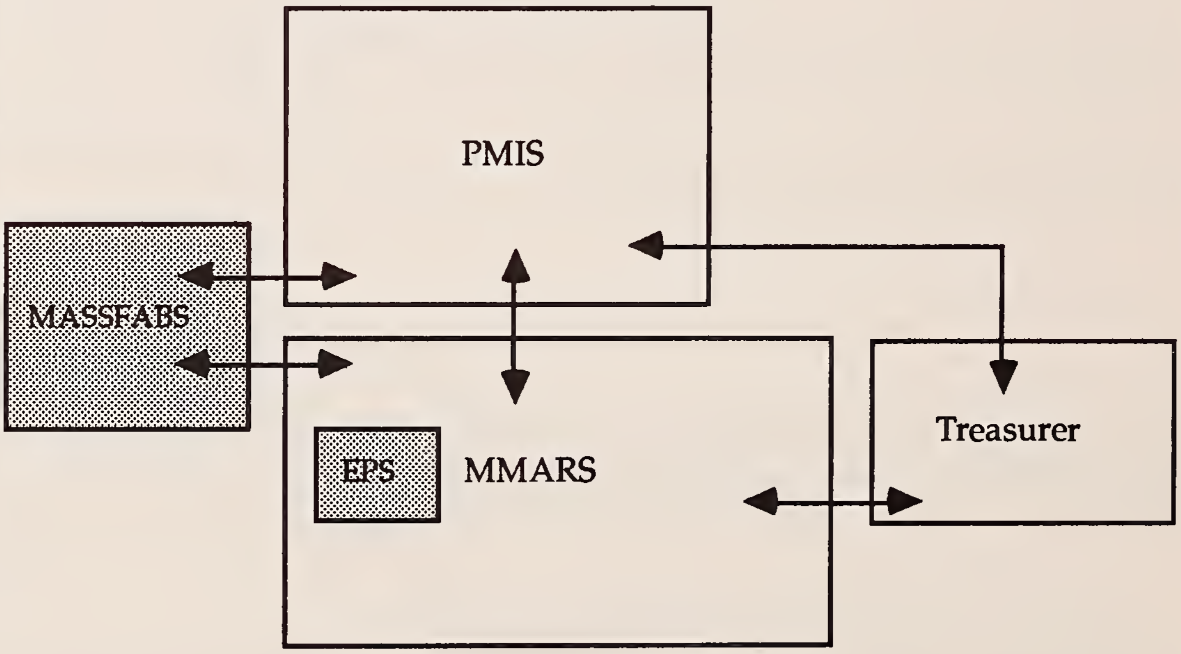
The Financial Systems Group developed MMARS, a centralized online system that integrates decentralized departmental accounting. During FY87 MMARS evolved to meet the functional needs of users and the technical requirements of MIS staff.

Major Achievements

- Support of MMARS. Agencies first began to use MMARS in July of 1986, and implementation and software enhancements continued through the balance of the year. As agencies came online, they gained access to extensive financial information and resource management techniques.
- The Extended Purchasing System. Financial Systems worked closely with the Purchasing Agent's Division and other agencies to develop a new purchasing system that streamlines bid issuance and automates requisition processing, giving the state the ability to take advantage of the billing and payment norms of particular industries — a flexibility that can save money.

EPS
Extended
Purchasing System

MASSFABS
Massachusetts
Fiscal Affairs
Budgeting
System



- Budget Bureau interface. FSG created a link between MASSFABS, the Budget Bureau's new, automated decision support system, and PMIS and MMARS, the payroll and accounting systems of the Commonwealth.

- Reorganization of the Financial Systems Group. The duties of FSG were realigned to provide MMARS production support, MMARS user support and reports, and financial interfaces and EPS support. The old Scheduling, Licensing, and Tracking Group was merged with FSG, and the name of the combined group changed to Financial and Department Systems.

Work scheduled for FY88 by the new Financial and Department Systems Group includes initiatives that will make MMARS easier to maintain and more current technically.

Objectives

- Rewrite MMARS code. FDS will complete an extensive revision of what BSS calls the "MMARS core software," in collaboration with the new Strategic Planning and Development section of BSS.

- Complete development of and enhancements to EPS. Planned enhancements to EPS will support several sophisticated and complex functions performed by the Purchasing Agent's Division that are not now supported by EPS.

- Design and implement a Ledger Reporting System. FDS's work on this system will enable MMARS to offer additional financial reports to the Comptroller's Division.

Massachusetts Administrative Projects

The Massachusetts Administrative Projects (MAPS) group has automated several essential administrative functions including the preparation of payroll and the administration of health benefits. The introduction of computer systems has enabled managers statewide to manage their employees more productively, and it has given the Commonwealth the ability to track and report on administrative information in new, more sophisticated ways.

Major Achievements

- The Massachusetts Personnel Reporting System. MPRS captures basic personnel and payroll information for all state employees and stores it in a centralized location. This provides agencies with information required for planning and budgeting and also makes it possible to count easily the number of people employed by the Commonwealth.

- Massachusetts Automated Group Insurance Commission (MAGIC). BSS has expanded efforts to integrate insurance functions into PMIS.

- A labor distribution system (LDS). This automated classification system allows each agency to group and track its salary expenditures, accurately assigns costs, distinguishes between state and federal funds, and integrates payroll expenditures into the accounting system. Finally, the system allows managers to track — and cut — costs in a variety of ways.

- Savings Bonds. The Savings Bond program is a flexible and convenient system that allows state employees to purchase savings bonds through payroll deductions.

- Incorporation of the Performance Management System (PMS) into the payroll system (PMIS). This gives agencies the ability to track and monitor the performance review process and provides an automated link between a manager's performance and the eventual award or denial of pay increases and bonuses.

- An interface between MPRS and the new MASSFABS system. This interface allows information from the state's three payroll systems to be used in the budgeting process.

MAGIC
Massachusetts Automated Group Insurance Commission

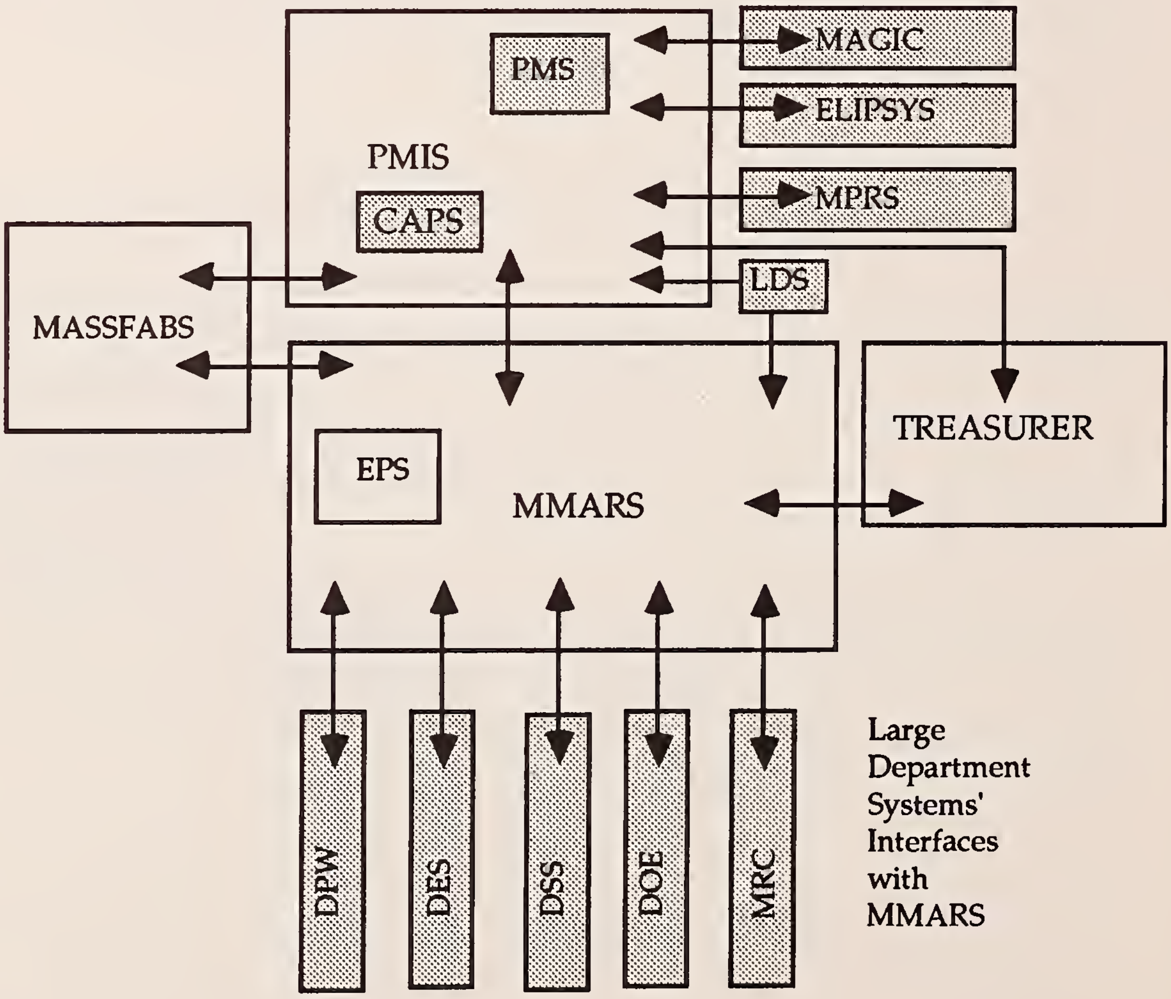
ELIPSYS
Examination and List Processing System

MPRS
Massachusetts Payroll Reporting System

LDS
Labor Distribution System

PMS
Performance Management System

CAPS
Commonwealth Automated Payroll System



Large Department Systems' Interfaces with MMARS

- Reorganization of MAPS. MAPS has been divided into two groups: Human Resources and Payroll Systems (which develops and maintains PMIS, MPRS, LDS, PMS, CAPS, and MAGIC), and PMIS II.

Objectives

- Complete the new Commonwealth Automated Payroll System (CAPS). This system will automate the preparation and tracking of payroll data for employees paid on a monthly basis. The completed system will provide online access to departments, streamline processing, and establish a fully automated interface with MPRS and MMARS.
- Create a linkage between ELIPSYS (the civil service system) and PMIS (the payroll system). This interface will result in more timely and accurate communication of civil service data.
- Develop PMIS II. The statewide personnel payroll system needs to be redesigned to incorporate additional Commonwealth entities and to allow for improved management reporting.

Scheduling, Tracking, and Licensing

Many state agencies look to BSS to develop software applications that are tailored to a specific set of operations. The responsibility for developing these agency-specific applications belongs to the Scheduling, Tracking, and Licensing (STL) unit. During the past year, the unit has worked with a dozen agencies in the development of mainframe applications that support those agencies' respective missions. Under the reorganization, STL has become part of the Financial and Department Systems group.

STL Client Agencies

Alcoholic Beverages Control Commission
Board of Medicine
Bureau of Special Investigations
Department of Industrial Accidents
Department of Social Services
Division of Capital Planning and Operations
Division of Registration
Division of Standards
Massachusetts Commission Against Discrimination
Office of Campaign and Political Finance
Office of Telecommunications

Major Achievements

- A Projects Management and Control System (CAPICS) that improves DCPO's ability to schedule and track projects. The Division of Capital Planning and Operations estimates that it is achieving savings of $1 million annually as the direct result of the greater fiscal and project control that this system provides.
- A consumer complaints management system for the Division of Registration. The system tracks complaints and allows the Division's inspectors to respond more promptly, enabling the Division to increase the refunds paid to consumers by $500,000 this year.
- An online contribution and expenditure tracking system for the Office of Campaign and Political Finance. This has helped the Office pursue noncompliance cases promptly.
- A billing system for the Office of Telecommunications. In previous years agencies were billed for phone services directly by the vendor; OTC has taken over preparation and issuance of monthly bills, which is expected to save $100,000 annually. Moreover, because the bills more accurately reflect usage, the state expects to save $1 million annually.

Objectives

- Produce a license and permit issuance system for the Alcoholic Beverages Control Commission. This system will strengthen ABCC's control and enforcement capability by allowing it to keep better track of violations and administer the proper response to offenses in a timely manner.
- Design and implement an inspection subsystem for the Department of Registration.

Bureau of Training

Applications Training
Planning and Coordination

Introduction

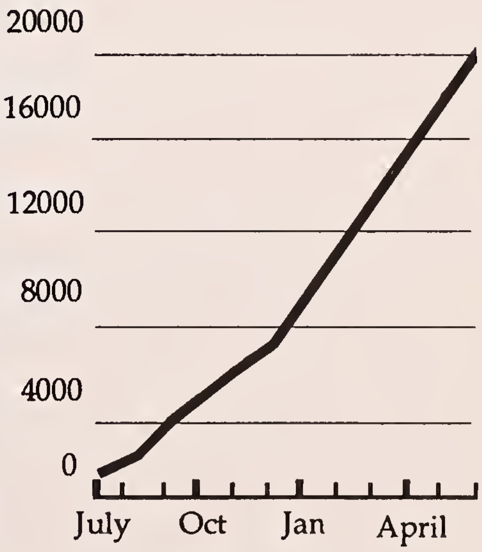
Faced with a rapidly changing hardware and software environment, OMIS's Bureau of Training, established in September, 1986, is responsible for ensuring that OMIS staff have the skills they need to perform their jobs and that all Commonwealth data processing professionals have an opportunity to obtain additional technical knowledge.

The Bureau, working closely with other data processing training groups, provides specialized technical courses for data processing professionals from all agencies. Other OMIS courses are tailored for agency personnel who use MMARS and PMIS, two of the Commonwealth's statewide systems. Through these programs, OMIS supports its own staff, helps the user community make more effective use of data processing resources, and provides a base of educational resources to agency technical staff.

Major achievements of the Bureau during FY87 include:

- State-of-the-art training center. The Bureau acquired space, furniture, and computer equipment for two technical classrooms. Each room is equipped with PC workstations that can access OMIS's Data Center and its local area network, and can communicate (via modems) with outside databases. Terminals connected to the OMIS Data Center allow hands-on training in Data Center software products and utilities.

- A significant increase in classes. Major growth was achieved in programs open to all state agencies and in courses designed for such specific target audiences as MIS managers, administrative support staff, and master console operators. The Bureau provided 323 classes for more than 3,600 state employees and 500 hours of computer-based training. In addition, OMIS sent 129 employees to advanced technical seminars.



Cumulative hours of training offered by BOT in FY87

During the next year BOT will:

- Design and implement a training program for OMIS's entry-level computer programmers. In response to the very high level of competition in the Boston area for data processing professionals, OMIS will conduct its own entry-level training for programmers. In addition to being a cost-effective way to develop and maintain a qualified work force, this initiative will complement the Department of Personnel Administration's projects and will support the Technical Pay Law (TPL) mandate to provide opportunities for bargaining unit employees to acquire the technical skills needed to qualify for TPL positions.
- Improve the Bureau's ability to track training information. In FY88, the Bureau will make transcripts available to all Commonwealth employees who participate in its programs and will produce a variety of training reports to help managers plan and evaluate staff development.
- Conduct the first OMIS annual conference. The Bureau of Training will plan the first of what is expected to be an annual event for Commonwealth MIS personnel. The conferences will be designed to help participants evaluate the latest developments in information systems technology, see demonstrations of new products and services, and meet informally with peers from other agencies.

Dianne B. Solomon, *Director, Bureau of Training*

The Bureau of Training consists of two operating units: Applications Training, and Planning and Coordination.

Applications Training

The teaching arm of the Bureau, Applications Training, offers weekly classes in IMAGINE, a sophisticated online report writing tool, and in MASSLINK, the Commonwealth's mainframe to microcomputer file transfer application. The group also supports a hotline that provides follow-up support for alumni.

Major Achievements

- Weekly classes for all state agencies in MMARS report generation using IMAGINE.
- Tutorials for advanced users of IMAGINE. Instructors worked with personnel from various agencies to help them develop agency-specific reports and enhance their IMAGINE skills.
- Training and support for OMIS staff. Introduction to PCs, Microsoft Word, and WordStar courses are now being offered on a regular basis.

■

Objectives

- Provide improved IMAGINE training. The Applications Training Unit will develop new training materials and increase the frequency and variety of IMAGINE training sessions.
- Support for users of the OMIS Data Center. In conjunction with the Customer Service Department, the Unit will design a training program to help technical professionals throughout state agencies take full advantage of software packages available at the Data Center.
- Offer MASSLINK training for PMIS and MMARS users.

Planning and Coordination

The Planning and Coordination (P&C) group works with OMIS staff to develop in-house teaching skills so that in-house OMIS expertise can be shared in a well-organized and instructive forum.

Planning and Coordination schedules more than 300 courses each year that range from word processing to advanced programming. In a typical month, 250 employees from OMIS and other state agencies attend 25 courses. P&C staff work with vendors to customize products for agency needs and handle all administrative details including registration and production of class materials.

Major Achievements

- Customized programs for new employees. Three programs provide new staff with the skills needed to work efficiently and well in the OMIS environment. The first, an Administrative Support Skills Enrichment Program, ensures that every secretary has the word processing and other skills needed to get the job done. A second program is designed for BCS computer operators, and a third for BSS programmers and analysts.
- Professional enrichment courses. OMIS also provides courses in time management, stress management, negotiation skills, listening skills, and presentation skills because it believes strongly that these issues affect the well-being and effectiveness of its employees.
- Improved procedures for course announcements and registrations. As the number of courses and participants increases, the Bureau has devised more efficient scheduling and registration procedures.

Objectives

- Implement a critical skills training program for OMIS's master console operators.
- Design a core program for OMIS's Human Resources staff.
- Expand the syllabus of courses available to all Commonwealth employees. OMIS is planning new courses in resource management, project management, and advanced technical topics.
- Automate evaluation form processing. With a scanner made available by the Department of Personnel Administration, P&C can read evaluation forms automatically and transfer the data to the Bureau's Educational Tracking System.

Bureau of Training Courses FY87

Data Processing & Systems

Advanced NATURAL/ADABAS Workshop
Advanced Systems Analysis
Chargeback Training
CICS Commands
CICS Concepts & Facilities
CLISTS
Data Analysis
Data Communications
DP Procurement and MMARS
Generic Wiring
IMAGINE MMARS
IMAGINE PMIS
Inside ADABAS
Intermediate ISPF
Introduction to Data Processing at OMIS
Introduction to COBOL
Introduction to JCL
Introduction to LANS
Introduction to NATURAL
Introduction to Systems Dumps
ISPF Dialog Manager
JCL Standards in the OMIS Data Center
Linkage Editor
MVS Concepts & Overview
Network Management
OMEGAMON
SAS
Screen Techniques and System Variables
Speaker Series
SSA Name
Structured Approach to Software Testing
Systems Development Process
Systems Workshop
TSO Fundamentals

Microcomputers

Introduction to Reflex
Introduction to the PC

Personal & Professional Enrichment

Advanced Stress
Accounting Basics
CPR
Governmental Accounting
First Aid
Negotiation Skills
Listening Skills
Presentation Skills
Stress Management
Time Management
Writing Skills

Management

Ethics Commission Overview
Performance Appraisal and PMS
Professional Development for Managers

Administrative

Administrative Personnel Procedures
Administrative Procedures at OMIS
AF-29 Procurement Process
Dealing with the Public Effectively
Effective Telephone Techniques
Microsoft Word 1 & 2

Office of Administration

Human Resources
Budget and Administrative Services

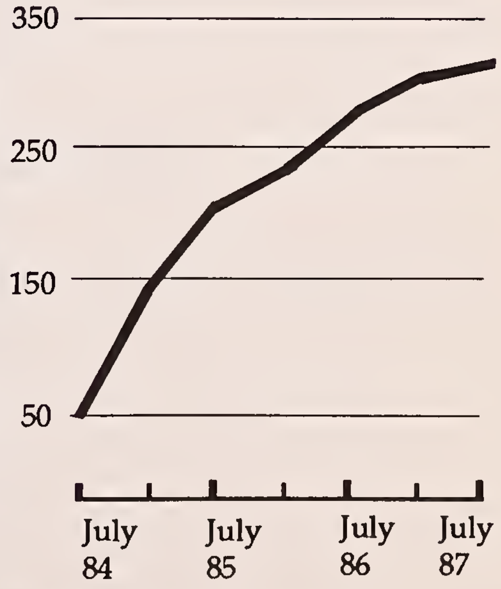
Introduction

As OMIS expands to respond to the Commonwealth's growing information service demands, the Office of Administration is committed to streamlined, productive use of its resources to support well planned, well managed departmental growth and development. In addition to providing critical administrative support functions for OMIS's bureaus, the Office of Administration has developed a role with a broader focus, with responsibilities assigned by the Executive Office for Administration and Finance that have statewide impact. External responsibilities are presented below; a discussion of internal OMIS activities follows.

Recent achievements of the Office include:

- Tax-Exempt Lease Purchase contract with the New England Merchants Funding Corporation. Under the TELP agreement, twenty-two agencies lease-purchased $24.1 million of equipment in FY87. Interest rates for these transactions averaged 6.9%, as opposed to taxable rates that ranged from 12% to 18%. Because of the lower rates, the state will save $4.1 million on these three- and five-year leases.

- Statewide Technical Pay Law (TPL). Twenty-two agencies have taken advantage of this 1983 law initiated by OMIS that enables the Commonwealth to offer competitive salaries to data processing professionals. The number of TPL employees grew to 317 in FY87, a 22% increase from the prior year. The Office of Administration assists by providing recruiting services, reviewing applicants' resumes, providing updates regarding TPL rules and procedures, and conducting periodic audits to ensure agency compliance with TPL policies. In addition, the Office of Administration conducted an on-site audit of each agency to ensure that yearly reviews were comprehensive and on file for all applicable positions.



Personnel hired under the provisions of the Technical Pay Law

- Chargeback. OMIS's new chargeback system makes the Data Center a utility, like a telephone company or a commercial data processing service bureau. OMIS now charges agencies for Data Center resources used. The Office of Administration sends monthly invoices, collects amounts due, manages the associated retained earnings account, and prepares monthly management reports for EOAF and the Legislature.

Louis F. Angeloni, *Director, Office of Administration*

The Office of Administration's two units are Human Resources and Budget and Administrative Services.

Human Resources

The Human Resources (HR) Unit develops and implements progressive personnel policies that support OMIS's human resource needs and demonstrate a commitment to affirmative action.

Major Achievements

- "03" conversions. OMIS converted 32 OMIS positions from consultant to employee status, a 64% reduction in "03" consultants.
- New performance evaluation systems. A full-time staff person assists OMIS managers implement the Performance Management System (PMS). OMIS also established a review system for its TPL employees.
- OMIS Policy Memoranda. In order to ensure common understanding and adequate communication of critical agency policy, HR prepares policy memoranda as needed. Recent subjects include conflict of interest, nepotism, and use of sick leave.

Objectives

- Implement the Employee Performance Review System (EPRS). With PMS implementation in good shape, HR's staff will turn its attention to EPRS, a new system for non-managers.
- Develop a professional recruitment capability for OMIS. As the Commonwealth's single largest employer of data processing professionals, OMIS recognizes its responsibility to serve as a role model for professional competence in public sector data processing. The Technical Pay Law, implemented in conjunction with a commitment to curtail dependence on consultant contracts, has enabled OMIS to establish a nucleus of salaried state employees who are quality data processing professionals. With this foundation, OMIS is now positioned to create a highly competitive data processing recruitment capability in the public sector.

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Budget and Administrative Services

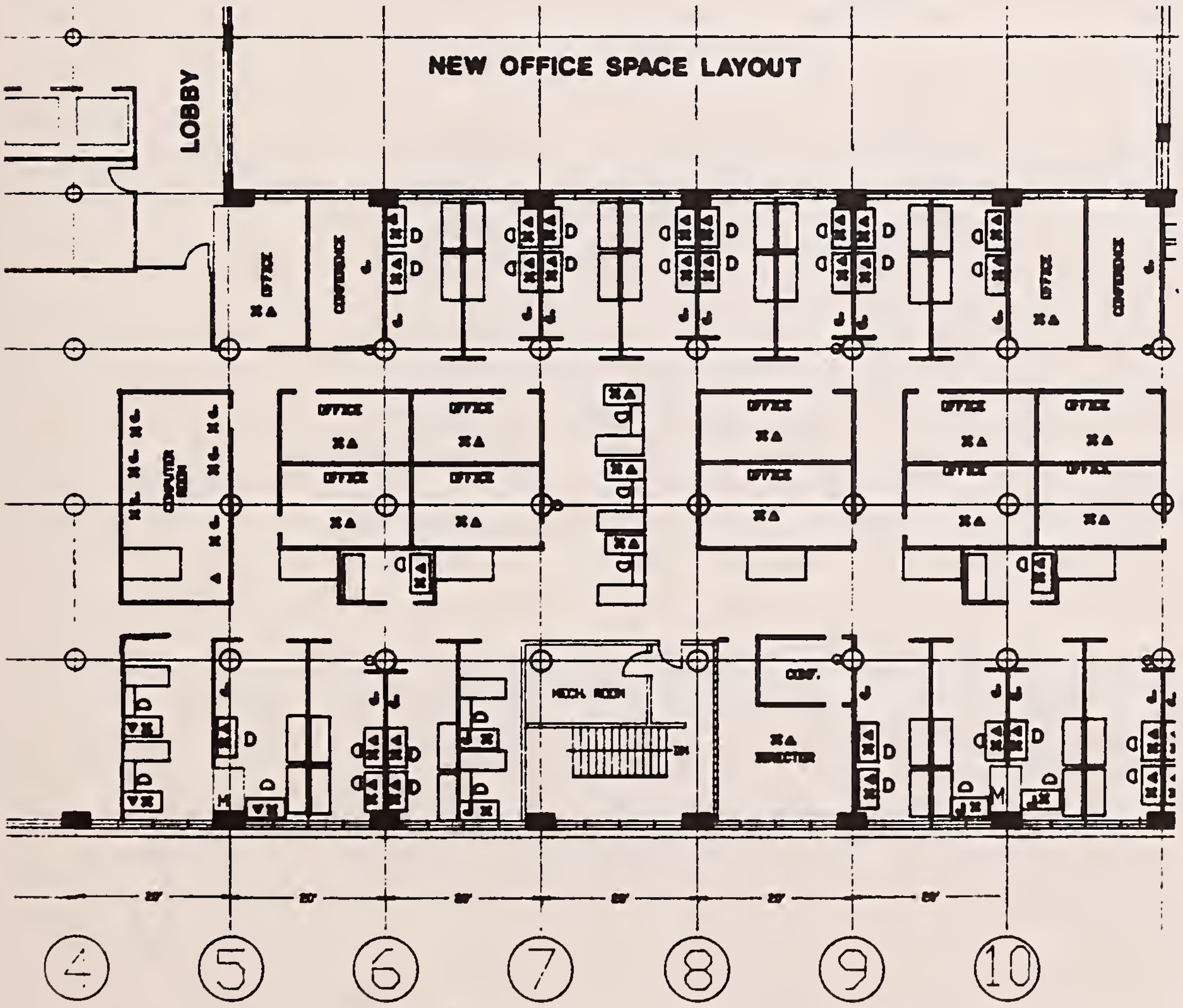
Monitoring OMIS's fiscal position and providing administrative support to OMIS's other bureaus are the Budget and Administrative Services (BAS) Unit's major responsibilities.

Major Achievement

- Cost center budgeting and expenditure reporting. The Budget and Administrative Services Unit has established 15 OMIS cost centers and has developed a system, integrated with MMARS, which provides managers with timely, accurate, and complete financial information about their budgets, encumbrances, and expenditures at the cost center level.

Objectives

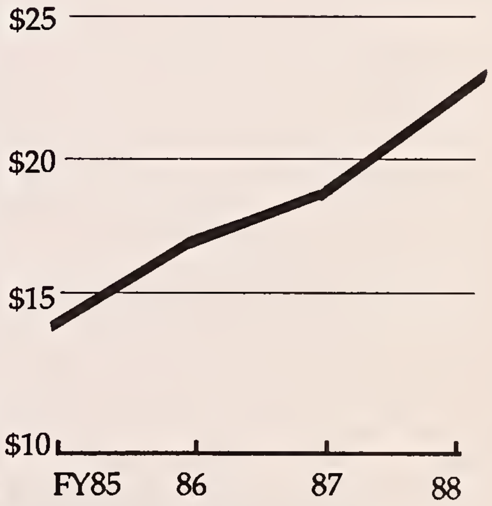
- Automate space management. Using a PC-based CAD program, BAS will integrate scaled office/workstation layouts for all OMIS space with OMIS's organization chart, telephone directory, and data communications network.
- Obtain additional space. Growth at BSS and BSPP, and the need for additional classrooms for BOT's agressive training program, make the acquisition of additional space a high priority.



The floor plan pictured above was produced with a Computer Aided Design, or CAD, program. BAS will use this sort of software in designing OMIS's new office space.

OMIS Financial Statements

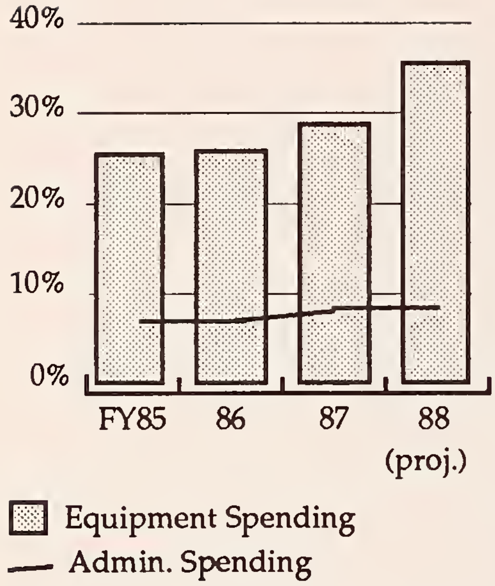
Sources of Funds	FY85	FY86	FY87	FY88 Projected
Appropriations:				
1101-2300	$ 8,688,494	$10,908,250		
1101-2304	1,189,314	1,238,320		
1101-2380*	1,783,302	1,961,564	$17,400,000	$18,649,129
Subtotal	11,661,110	14,108,134	17,400,000	18,649,129
Reserves:				
Salary Reserve	87,668	140,170	321,625	
MIS Reserve	1,000,000	800,000	246,500	1,296,474
Lease Reserve	1,000,000	1,500,000		
Subtotal	2,087,668	2,440,170	568,125	1,296,474
Capital Outlay**	1,190,371	1,317,641	1,570,421	2,970,422
TOTAL	$14,939,149	$17,865,945	$19,538,546	$22,916,025
Percent Increase over Prior Year		19.6	9.4	17.3



OMIS funding grows from $14,939,149 to $22,916,025 as State automates.

*Starting in FY87, accounts 1101-2300 and 1101-2304 were consolidated with 1101-2380.

**Capital Outlay. Actual capital expenditures for FY85, FY86, FY87, and FY88 were $5.95M, $0.64M, $1.26M, and $7.0M respectively. However, since the useful life of the purchased equipment is five years, OMIS has distributed these capital expenditures over the five year period. Thus FY85's $5.95M expenditure is counted as $1.19M in FY85 and in each of the next four years. This adjustment makes it easier to see the true growth in OMIS's annual expenditures.



Percent of funds spent for equipment has grown while percent of funds spent for administration has remained nearly constant.

Uses of Funds	FY85	FY86	FY87	FY88 Projected
All Accounts:				
Personnel	$ 9,434,793	$11,466,463	$12,064,231	$12,744,102
Training	115,891	186,089	133,415	227,550
Equipment				
-purchase (capital)*	1,190,371	1,317,641	1,570,421	2,970,421
-purchase (other)	577,941	451,234	286,184	897,200
-rental	477,883	477,828	639,002	586,840
-lease	275,365	623,212	1,313,777	1,907,930
-maintenance	1,275,809	1,723,487	1,785,850	1,764,780
Administration	1,041,171	1,215,443	1,586,767	1,817,202
Reversion	549,925	424,548	158,899	0
TOTAL	$14,939,149	$17,865,945	$19,538,546	$22,916,025

Distribution of Funds	FY85	FY86	FY87	FY88 Projected
All Accounts:				
Office of the Director	$ 283,843	$ 339,452	$ 376,030	$ 656,978
Special Projects	582,627	696,772	758,937	201,881
Bureau of Systems Services	3,975,207	4,673,732	4,490,177	5,211,663
Bureau of Computer Services*	8,137,722	9,868,356	11,501,913	13,983,291
Bureau for Systems Policy and Planning	947,915	1,060,368	1,325,575	1,675,252
Bureau of Training	224,985	246,106	382,614	572,114
Office of Administration	416,925	556,612	544,401	614,846
Reversion	549,925	424,548	158,899	0
TOTAL	$14,939,149	$17,865,946	$19,538,546	$22,916,025

*Capital Expenditures are included in this item. See note under Sources of Funds.

Graphics and Layout by
Spencer Design and
the BSS Publishing Group

The text for this report was word processed in Word and in WordStar on IBM-compatible XT and AT personal computers. These files were then converted for use on the Macintosh Plus using MacLink. Graphics for the piece were formulated in Excel and then moved into MacPaint, MacDraw, Chart, or PageMaker for special effects. The final pages were composed in PageMaker and printed on an Apple LaserWriter Plus. One page –page 36– was set on a Linotronic typesetting machine to show the reader the difference between typeset and LaserWriter copy at 1270 and 300 dots per inch respectively.

The typeface is Palatino.